

Spring return actuator for small fire and smoke dampers 90° in ventilation and air-conditioning systems

- Torque 6/4 Nm
- Nominal voltage AC/DC 24 V
- Control: Open/close
- Damper rotation: 12 mm form-fit


Technical Data

Electrical data	Nominal voltage	AC 24 V, 50/60 Hz / DC 24 V	
	Nominal voltage range	AC 19.2 ... 28.8 V / DC 21.6 ... 28.8 V	
	Power consumption	Motoring	5 W @ nominal torque
		Holding	2.5 W
		For wire sizing	7 VA / I _{max} . 5.8 A @ 5 ms
	Auxiliary switch	2 x 1 SPDT	
	Contact rating (contacts gold plate on silver)	1 mA ... 3 A (0.5 A), DC 5 V ... AC 250 V □	
Switching points	5°↔ / 80°↔		
Connecting	Motor	Cable, 1 m, 2 x 0.75 mm ² (halogen-free)	
	Auxiliary switch	Cable, 1 m, 6 x 0.75 mm ² (halogen-free)	
Functional data	Torque Motor	Min. 6 Nm	
	Spring return	Min. 4 Nm	
	Direction of rotation	Selected by mounting L/R	
	Angle of rotation	Max. 95°↔ (incl. 5°↔ spring pretensioning)	
	Running time	Motor	40 ... 75 s (0 ... 6 Nm)
		Spring return	~20 s @ -20 ... +50 °C / max. 60 s @ -30 °C
	Sound power level	Motor	Max. 45 dB (A)
		Spring return	~62 dB (A)
	Damper rotation	Form-fit 12 mm (10 mm with adapter supplied)	
	Position indication	Mechanical with pointer	
Service life	Min. 60'000 safe positions		
Safety	Protection class	III Safety extra-low voltage	
	Degree of protection	IP54 in all mounting positions	
	EMC	CE according to 2004/108/EC	
	Low voltage directive	CE according to 2006/95/EC	
	Mode of operation	Type 1.AA.B (EN60730-1)	
	Rated impulse voltage	0.8 kV (EN60730-1)	
	Control pollution degree	3 (EN60730-1)	
	Ambient temperature range	Normal duty	-30 ... +50 °C
		Safety duty	The safe position will be attained up to max. 75 °C when initiated by a thermal trip
	Non-operating temperature	-40 ... +80 °C	
Ambient humidity range	95% r.H., non-condensating (EN 60730-1)		
Maintenance	Maintenance-free		
Dimensions / weight	Dimensions	See «Dimensions» on page 2	
	Weight	Approx. 1.6 kg	

Safety notes


- The actuator is not allowed to be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- The actuator is adapted and mounted to the fire and smoke damper by the damper manufacturer. For this reason, the actuator is only supplied direct to safety damper manufacturers. The manufacturer then bears full responsibility for the proper functioning of the damper.
- The device may only be opened at the manufacturer's site. It does not contain any parts that can be replaced or repaired by the user.
- The device contains electronic and electrical components and may not be disposed of with the household waste. Observe local regulations and valid laws.

Product features

- Mode of operation** The actuator moves the damper to its normal working position while tensioning the return spring at the same time. If the power supply is interrupted, the energy stored in the spring moves the damper back to its safe position.
- Signalling** Two microswitches with fixed settings are installed in the actuator for indicating the damper end positions. The position of the damper blade can be read off on a mechanical position indicator.
- Manual operation** Without power supply, the damper can be operated manually and fixed in any required position. Release of the locking mechanism can be achieved manually or automatically by applying the supply voltage.


Accessories

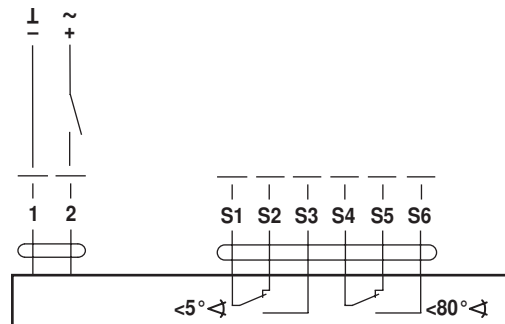
	Description	Type
Electrical accessories	Thermoelectric tripping device	BAE72 (-F-ST)
	Thermoelectric tripping device with test button	BAE72-S (-F-ST)
	Auxiliary switch, 1 x SPDT 6 A (2.5 A), AC 250 V	SN1
	Auxiliary switch, 2 x SPDT 6 A (2.5 A), AC 250 V	SN2
	Cable set with plug (L = 0.5 m) for BF.. and BLF.. on communication and power supply units	ZST-BS
Mechanical accessories	Adapter with clamp for rotary axes up to 20 mm for BF.. and BLF..	ZK-BF
	Adapter with DM18 rotary axis, L = 33 mm, for BF.. and BLF..	ZA18-BF
	Adapter 12/8 mm for BF.. and BLF..	ZA8-BF
	Adapter 12/11 mm for BF.. and BLF..	ZA11-BF
	Bracket for SN1 and SN2 auxiliary switches for BLF..	ZSN-BLF

Electrical installation

Wiring diagram

Note

- Supply via safety isolation transformer 
- Parallel connection of several actuators possible. Power consumption must be observed!



Dimensions [mm]

Dimensional drawings

